

SANTA CRUZ, ANTIGUA, GUATEMALA, AND THE SPANISH COLONIAL ARCHITECTURE OF CENTRAL AMERICA

SIDNEY D. MARKMAN

FEW BUILDINGS were built in the sixteenth century in Central America and even fewer are preserved today. The reasons are: (1) The scant population, both indigenous and Spanish. (2) The Indians were still being gathered into towns and converted to Christianity. (3) The ephemeral nature of the building materials commonly employed. (4) The lack of trained craftsmen. (5) The ever-recurring earthquakes and subsequent rebuilding, enlarging and altering of ruined structures. It is, therefore, not until the seventeenth century that ecclesiastical and civil structures with formal plans and of durable materials in appreciable numbers begin to appear. A typical example of these is *La Ermita de la Santa Cruz* in Antigua, Guatemala (Fig. 1).

Founded in the early seventeenth century or before, after having gone through several stages of construction the present church was completed and inaugurated in 1731.¹ It was to be destroyed and abandoned about forty years later when the earthquake of 1773 levelled the city of Antigua.² A small and unimportant hermitage when compared to the principal churches and conventual buildings of the dominant religious orders in Central America, Santa Cruz is nevertheless a remarkably fine example of the type of plans and façades common in the seventeenth and eighteenth centuries. It reflects, furthermore, typical building practices as well as the economic, social, religious, and political determinants of the colonial architecture of the former Audiencia and Capitanía General de Guatemala, or the present republics of Costa Rica, Nicaragua, El Salvador, Honduras, Guatemala and the state of Chiapas in Mexico.

I. History

The earliest reference, documentary or literary, to the church or hermitage of Santa Cruz is found in Remesal, a Dominican friar, writing c. 1617. He mentions the *barrio* or neighborhood of Santa Cruz, but has nothing to say about the church under the administration of his order.³

SIDNEY D. MARKMAN is a member of the faculty of fine arts of Duke University. This paper was read at the 1955 Annual Meeting of the Society in New York.

Vásquez, writing in the decades just before and after 1700, lists this building among the various *ermitas* of the *barrios* of Antigua.⁴ Fuentes y Guzmán, c. 1690, also mentions the church, saying it was located right up against a hill (which it is in fact), had pleasant sounding bells in its tower, was vaulted and that in his day the population of the *barrio* numbered thirty-seven *indio* families.⁵ His description of the building does not coincide with the remains of the church, for it has two towers and is only partly vaulted and roofed with wood as well. Furthermore, that an unimportant sparsely populated Indian neighborhood should have a vaulted church is most unusual, since vaulted structures in seventeenth-century Central America are extremely rare, and found only in the most important ecclesiastical establishments.

The vaults of the church of the principal house of the Dominicans located in Antigua were finished in 1666,⁶ approximately 124 years after the order had been first established in Central America early in the sixteenth century.⁷ So important a church as that of the chief *convento* of the Franciscan order, also in Antigua, was still roofed with a wood *artesonado* in 1673, at which time it was undergoing major repairs.⁸ The seventeenth century witnessed great rebuilding and altering activity, since sixteenth-century ecclesiastical and civil buildings had been constructed for the most part of the simplest materials.⁹ Therefore, in the early seventeenth century Santa Cruz could have been hardly more than a thatch hut.

Ximénez, who arrived in Guatemala in 1688 and was writing his chronicle of the Dominican Order in about 1720, relates how one Fray Diego de Rivera who died in 1662 “. . . aumentó mucho la yglesia del barrio de Santa Cruz é hizo la capilla que la milagrosa ymagen de Ntra. Sra. que allí se venera.”¹⁰ His statement is corroborated by a contemporary document, a contract for the completion of the church¹¹ dated February 4, 1662. Apparently a new church was begun after the middle of the century to replace a primitive structure, possibly of adobe or wattle and daub, and building operations were briefly interrupted when Fr. de Rivera died in 1662.

The question that arises is what kind of building was in construction and apparently half completed in 1662. According to Ximénez, de Rivera had built a special chapel and enlarged the church before he died. Because of certain constructional peculiarities, the sacristy (Fig. 2-C) may very likely date before the rest of the building and be identified as the chapel, and by the same token have provided a basis for Fuentes y Guzmán to say the church was vaulted. Furthermore, the contract of 1662 was entered into with a master carpenter, the inference being that since the masonry work, or half the job, had been done, his main task was to enclose the building with a wood roof. If this reasoning be correct, the roofing of the 1662 church was very much like the one inaugurated in 1731, now in ruins: part brick vaults and part a pitched A-shaped wood and tile roof (Fig. 3). The mixture of different materials and methods of construction in the same building, though seemingly incongruous, is not unique here and was common practice elsewhere.¹²

References to Santa Cruz appear during the eighteenth century in various *cabildos* of the *ayuntamiento* of Antigua. In 1727 one José Vázquez, a Dominican Friar, asks permission of the *ayuntamiento* to pipe water from the River Pensativo, about 50 meters to the west, for use in the "construction" of the church.¹³ It is most probable that the church completed soon after 1662 must have suffered some damage in the many earthquakes in the years following, especially the very severe ones of 1689 and 1717.¹⁴ Four years later in 1731 the new church was opened for services.¹⁵ Some further work was done in 1746, and minor repairs made after the earthquake of

1751.¹⁶ The church remained intact until the final destruction and abandonment of Antigua in 1773.¹⁷

II. Plan and Structure

The *barrio* where the church is located, as described by Fuentes y Guzmán,¹⁸ lies in a narrow strip of land just to the east of the city between the left bank of the Pensativo River and a steep hill (Fig. 1). The church *atrio* also served as the local town square. It measures 40.00 m. from the *lonja* steps to an embankment which had been built c. 1742 to keep the river from flooding the whole *barrio*.¹⁹ The width of the *atrio* was no less than 29.00 m. as far as can be determined, for the surrounding area is now occupied by a coffee plantation. A stone cross, now broken in two, once stood on a pedestal in the center of the *atrio*.

The platform or *lonja* just in front of the façade measures 15.00 m. by 6.55 m. (Fig. 2-A). It has three steps, each tread measuring 0.40 m., thus the width at the lowest step may be restored as 17.40 m. The paving is now missing. The south steps are ruinous, while those on the north side are now covered by a wall of later construction which continues a short distance beyond the *lonja* and abuts on the north tower. The masonry courses of the wall and tower are not tied. A small door gives access to the area to the north where a fountain built soon after 1731 is still to be seen.²⁰

The building proper measures 42.00 m. in length and 10.35 m. through the nave. With the addition of the sacristy (Fig. 2-C), the façade as a whole is 19.50 m. wide.

The walling, no better or worse than is common in Antigua, consists of rubble stone laid in thick beds of



FIG. 1. Santa Cruz. Façade. (Author)

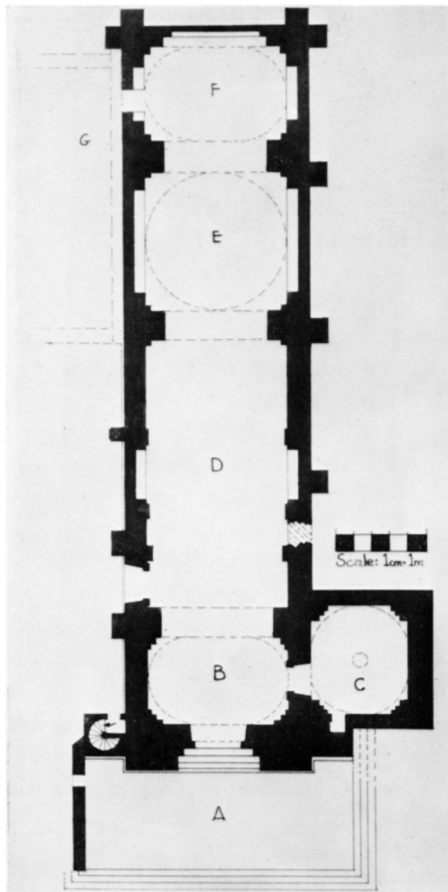


FIG. 2. Santa Cruz. Plan. A. *Lonja*. B. *Coro*. C. Sacristy. D. Nave. E. Crossing. F. Sanctuary. G. Priest's house. (Author)

mortar and divided into horizontal bands by two or three courses of thin square brick laid in mortar as thick as the brick itself. These brick stringer or levelling courses are spaced at intervals of about two feet apart up the height of the wall. Except for the one party wall, the other three sacristy walls are much cruder than those of the rest of the church. They are built of larger stones and lack the stringers.

Wall surfaces are covered with various coats of lime and sand plaster, *mezcla*. The last or finishing coat is a hard smooth-troweled lime plaster and is painted.²¹ All architectural ornament, mouldings and even sculptures, are also executed in *mezcla* laid over a brick core, a practice common in all of colonial Central America.

A timber roof, now missing, abutted on the rear of the façade wall and extended over the nave to the crossing (Fig. 3). A cupola on spherical pendentives once surmounted the crossing (Fig. 4). Curious flat ellipsoidal "half watermelon" domes over oblong bays cover the sacristy, the sanctuary and *coro bajo*, the latter ruinous (Fig. 2-C, F, B).²²

False or non-functional ribs criss-cross the under sur-

face of the domes. These ornamental ribs are made by setting one of the square colonial bricks in each course on a forty-five degree angle so that one corner projects from the vault face. This process is repeated in each succeeding course up the vault. The triangular projection thus formed is covered with *mezcla* and modelled into a moulding profile with the resultant appearance of a rib.

The flat ellipsoidal "half watermelon" domes or vaults of the sacristy, sanctuary and *coro bajo* spring directly from the walls (Fig. 5). The supporting arches, except for the elliptical one between nave and *coro bajo* and the half circle arch between crossing and sanctuary (Figs. 3 and 4), are really decorative mouldings in high relief analogous to the false ribs of the vaults.

The exterior buttresses (Fig. 2) are not symmetrically arranged in pairs, nor are they aligned on centers with the interior engaged piers of the crossing. Four similar buttresses line the south wall of the building behind the sacristy, while but three are on the opposite wall. A smaller buttress located between the side nave door and the priest's house rises only about half the height of the wall, and still

FIG. 3. Santa Cruz. Rear of façade wall and *coro*. (Author)



another emerges from the top southwest corner of the priest's house continuing up the total height of the wall.

The purpose of the buttresses is to reinforce the wall, rather than the interior vaults. References both in contemporary literature and archival documents indicate a common practice whereby special *estribos* or *rafas*, piers of brick or stone or both, are added as a measure to strengthen weakened walls, or are built from the first to reinforce walls constructed of rammed earth or adobe.²³

The nave (Fig. 2-D) is approximately 15.00 m. long by 7.80 m. wide. Four unequal bays punctuate each wall. The third pair are in the form of deep round-headed niches probably designed to receive *retablos*. Smaller niches are located immediately above. Square windows are set high up in the wall in each first and fourth bay. A door in the first bay of the north wall gives access to the patio of the priest's house.

The crossing is square in plan (Fig. 2-E). The pendentives and supporting arches of the cupola, still *in situ*, are badly cracked (Fig. 4). The cupola has fallen only recently. A photograph taken about thirty years ago,²⁴ shows it to have been similar to the dome over the crossing of the conventual church of La Merced, Antigua, built between 1761–1767.²⁵ The latter has a drum with windows under the dome which is decorated with non-functional brick and mortar ribs converging on the lantern.

The sanctuary (Fig. 2-F), partially excavated from the hill behind, as described by Fuentes y Guzmán,²⁶ is oblong in plan and roofed with a “half watermelon” dome. An octagonal window, bricked up probably during some alterations in the eighteenth century,²⁷ once pierced the rear wall. Two shallow rectangular niches are located on either side of the window. Below, a rather unusual niche, the top of which describes a low flat arch, rises about 2.50 m. from the floor to the crown. Really a niche within a niche, it reduces the thickness of the wall considerably. Large octagonal windows are set immediately under the

arches of the lateral bays and are uniform with the windows located in the exterior walls of the crossing, pointing thus to the conclusion that the crossing and sanctuary date from the same building operation.

The sacristy is different in some respects from the rest of the building (Fig. 2-C). Interior dimensions are 5.30 m. by 6.25 m. Exterior measurements are: east or rear wall 6.70 m.; south wall 7.85 m.; west wall, abutting on the south tower, 4.50 m. The walling, as described above, is different from the rest of the building. The front and rear walls are about half as thick as the other two. A circular window is centered on the east wall. The octagonal window opposite is centered in conformity only with the shorter exterior west elevation (Fig. 1). It is off center inside and not lined up with the circular rear window. An oculus pierces the crown of the “half watermelon” dome. Decorative pilasters, false high relief arches in the form of mouldings, and false ribs complete the scheme.

A cubicle or closet measuring 1.00 m. by 0.85 m. is located within the depth of the west wall. A crack extends up the wall above where it abuts on the tower, and continues into the haunch of the dome.

The rough walling, the oculus in the dome, the octagonal window off center inside, and the crack between tower and sacristy, all lead to the conclusion that the sacristy and the façade, of which the south tower is an integral part, were not erected in the same building operation.

Little remains of the priest's house which also was partially excavated from the hill. As mentioned above, a buttress rises from the corner of the west wall which once returned in a line parallel to the corresponding south buttress outside the crossing.

III. The Façade

As it rises from the stepped *lonja* and seen from the *atrio*, the façade (Fig. 1) is like a gigantic outdoor *retablo*.²⁸ *Retablo* façades with flanking towers are common

FIG. 4. Santa Cruz. Crossing with pendentives. (Author)



FIG. 5. Santa Cruz. *Coro bajo* and door leading to sacristy. (Author)



in other late seventeenth- and eighteenth-century churches in Antigua and elsewhere.²⁹ Of the two towers which frame the *retablo*, the south is more ornamental than functional and serves to fulfill the needs of symmetry (Figs. 2 and 6). A circular stairway in the other gives access to the *coro alto*. Belfries with small pyramidal roofs shaped like merlons once surmounted the towers.³⁰

The space between the towers is divided into three vertical bays, *calles*, and three horizontal stories, *cuerpos* (Fig. 6).³¹ The third or uppermost horizontal division acts as a *remate* or finial. It consists mainly of a large niche over the central bay with multilinear half pediments on either side which undulate downward and over the lateral bays forming thus a triangular-shaped crest, the pinnacle of which once rose above the merlon-shaped roofs of the towers.

The scheme of three-by-three divisions is typical of many Central American church façades, especially in Antigua and its environs. Exceptions occur in some churches under Dominican administration in Chiapas, Mexico, where a third *cuerpo* or storey is added just under the *remate*, making four horizontal divisions. The Chiapas church façades appear more vertical than the antiguoño because of greater height in proportion to width.³²

The door is the focal point in the symmetrical design around which the other elements are balanced (Fig. 1). Its functional character, however, is not obscured, for the sharp outline of the opening is accented as it is set back in a niche of the same shape with the resultant appearance of a door within a door (Fig. 6). This is a common device in Antigua and elsewhere in Guatemala.³³ The door ornament is also more reserved and somewhat crisper than that of the rest of the façade, the surface of which is covered with figures in relief and lacey *ataurique* (Fig. 6).

The large square niche window in the second *cuerpo* immediately above the door lights the *coro alto* (Figs. 1, 3 and 6) and is framed by a moulding patterned like the jewelled chain, *toisón de oro*, of the Hapsburg order of the Golden Fleece. The sides and top of the window as they slant back at an obtuse angle through the thickness of the wall diminish the size of the opening to form a deep picture frame niche. A statue probably once occupied the sill. On either side of the niche window are set low-relief pilasters whose indented or serrated surfaces may be described as short lengths of a moulding comprised of a large concave profile and a smaller rounded fillet, superimposed alternately up the height of the pilaster. Diminutive niches occupy part of the space between the serrated pilasters and the columns of the applied orders of the lateral bays.

The third *cuerpo* of the central bay above is actually part of the *remate* as a whole, and consists primarily of a niche in which a sculptured group representing a cruci-

fixion is still *in situ* (Figs. 1 and 6). A low curved pediment crowns the bay. To either side multilinear half pediments carry the eye to the lower portion of the *remate* over the lateral bays.

Flanking the door and the window above pairs of columns frame the niches in each storey (Fig. 6). The superimposed orders rise from a dado divided into three parts like an order and decorated with simple geometric ornament. The bays are crowned with merlons which as part of the *remate* design are connected with the niche of the third storey central bay by means of the undulating half pediments.

The dado cornice serves as a stylobate for the lower order. The thin plinths are decorated with the *toisón de oro* pattern. The column bases are composed of two major profiles. The element resting directly on the plinth consists of a small torus with a fillet. Directly above is an element S-curved in profile somewhat like a squat or compressed Greek amphora. Its surface is covered with a floral pattern. The shaft consists of three colonettes with a longitudinal moulding, triangular in section, between each. A deep flute, also triangular in section, runs the length of each colonette in marked contrast to the sharp knife-like edge of the moulding projecting between them (Fig. 6). A Tuscan type capital surmounts each of the three colonettes between which diminutive busts of *putti* with arms raised overhead like atlantids support the corners of the thin abacus above.

The entablature of the first *cuerpo* runs across the whole façade and unites the three bays (Fig. 6). A series of corbel-like superimposed mouldings breaks the surface of the architraves. The frieze is a protruding convex band, and is covered with an intricate geometric pattern relieved by *putti* in high relief with sashes suspended across their chests from one shoulder; these figures support the horizontal cornice above. Rather than close the triangle, each half of the raking cornice over the door returns in a large volute. Above the side bays indented pediments with raking cornices fall back to form recesses. The raking cornice, however, continues behind and completes the triangle. Thus the first *cuerpo* side bay pediments are broken in plan only, not in elevation.

The second *cuerpo* is not as high as the first, but follows the same scheme (Figs. 1 and 6). The wall, reduced in thickness here, is set back the depth of the recess formed by the indented pediments below. The finials of the side bays immediately above the second *cuerpo* are part of the *remate* design. Of the two merlons, the center one is higher, while a third inside element is incorporated into the sweep of the undulating line of the multilinear half pediments which frame the third storey central bay.

The twin towers are left relatively plain, the surface broken only by low relief fluted pilasters ending in finials consisting of full front heads. Belfries with pyramidal

shaped roofs, now gone, projected above the side bays, but below the central bay.

Except for the twin towers on either side, the entire surface of the *retablo* façade between is covered with plaster ornament in relief, sometimes called *ataurique*,³⁴ consisting of geometric and botanical patterns and the human figure as well. This type of surface decoration which is really modelling in mortar, *argamasa*, has a spontaneity rarely seen in stone carving. The quality of the Santa Cruz *ataurique* is equal to that of some of the more important ecclesiastical structures: La Merced, El Carmen, San Sebastian, the cathedral in Antigua, and Santo Domingo in San Cristobal las Casas. Beside floral and geometric patterns, and human and animal figures in the repertoire, a common motif is the *toison de oro*. In Santa Cruz it appears on the plinths of the orders, around the niche window over the door, on the archivolt of the outer arch of the doorway, on the soffit of the arch of the door opening itself, on the archivolt of the supporting arch of the cross-

ing facing the nave (Fig. 4), and is repeated inside the building.³⁵

The over all effect of the *ataurique* here is like tapestry weaving, yet the architectural elements are not submerged by it. The superimposed orders, the niches and door and window openings are all left clear and unobstructed. The design of the façade is unified by a scheme based on structural logic and architectonic form.

IV. The Style

What is the architectural style of Santa Cruz, a style typical of colonial Central America?³⁶ Like all Spanish institutions, architectural styles are obviously imported in colonial Central America. One does not necessarily follow the other in the same sequence or progression as in Spain.³⁷ The terminology employed in the classification of European architecture, such as Baroque and Rococo, are actually misleading not only in a chronological sense, but in a socio-historical sense as well.³⁸



FIG. 6. Santa Cruz. Façade with south tower.
(Author)

Conclusions based solely on comparisons with monuments and styles of the Iberian Peninsula may prove confusing and misleading. Archival documents and notices of contemporary writers, the dates and intensity of earthquakes, the history and culture of the region and a direct physical study of the monuments are more valid criteria by means of which terminology independent of the European may be established.³⁹

The sixteenth century, which witnessed the struggle of the hispanization of the native population and the establishment of Spanish institutions in Guatemala and Central America, was hardly an epoch remarkable for extensive

construction activity. It was not until almost a century later that the ferment of the conquest, both spiritual and material, had subsided sufficiently for an accelerated building activity to occur and for a distinctive architectural style to begin to appear. This was the time when the majority of the churches were rebuilt. They had been hurriedly constructed in the sixteenth and early seventeenth centuries in a rough and ready manner. The rebuilding was carried out on a formal basis with carefully thought out, though simple, plans and more permanent materials. Santa Cruz is one example of such a renovation.

DUKE UNIVERSITY

ABBREVIATIONS AND BIBLIOGRAPHY.

Where no abbreviation is given the surname of the author is used.

AGG, Archivo General de Gobierno. The colonial archives in Guatemala City, C. A. Document numbers have four parts thus: (1) classification, (2) date, (3) expediente, (4) legajo; for example, A1.20 (1636) 690-53.

Arana, Tomás Ignacio de, *Relación de los estragos y ruinas, que a padecido la ciudad de Santiago de Goathemala por terremotos, y fuego de sus volcanes en este año de 1717*. A. de Pineda Ybarra (Antigua Guatemala) 1717.

ASGH, *Anales de la Sociedad de Geografía e Historia*, Guatemala, Vol. I, 1924—.

BAGG, *Boletín del Archivo General de Gobierno*, Guatemala, Vols. I-X, 1935-1945.

Efem, Pardo, Joaquín J., *Efemérides para escribir la Historia de la Muy Noble y Muy Real Ciudad de Santiago de los Caballeros del Reino de Guatemala*, Guatemala, 1944.

Fuentes y Guzmán, Francisco Antonio de (c. 1690), *Recordación Florida del Reyno de Guatemala*, 2nd. ed., 3 vols., Guatemala, 1932-1933.

García Pelaez, Francisco de Paula (1785-1867), *Memorias para la Historia del Antiguo Reino de Guatemala*, 2nd. ed., 3 vols., Guatemala, 1943-1944.

González Bustillo, Juan, *Razón puntual de los sucesos más memorables y de los estragos, y daños que ha padecido la ciudad de Guatemala, y su vecindario, desde que se fundó en el parage llamado Ciudad Vieja o Almolonga, y de donde se trasladó a el que actualmente se halla*. Mixco, Guatemala, 1774. Reprinted in "La Ciudad Mártir," published in serial form in *Diario de Centro América*, Guatemala, 1923.

González Dávila, Gil (1578-1658), *Teatro eclesiástico de la primitiva Iglesia de las Indias occidentales*, 2 vols., Madrid, 1649-1655. Vol. I, 139 ff. deals with Guatemala.

Isagoge Histórica Apologética de las Indias Occidentales de la Provincia de San Vicente de Chiapa y Guatemala, de Orden de Predicadores, Guatemala, 1935. Written soon after 1700. Author anonymous.

Juarros, Domingo, *Compendio de la Historia de la Ciudad de Guatemala*, 3rd. ed., 2 vols. in one, Guatemala, 1936. First edition 1808-1818.

Molina, Antonio de (d. 1683), *Antigua Guatemala; memorias del m. r. p. maestro fray Antonio de Molina continuadas y marginadas por fray Agustín Cano y fray Francisco Ximénez, de la Orden de Santo Domingo*, edited by Jorge del Valle Matheu, Guatemala, 1943.

Ponce, Alonso (c. 1586), *Relación breve y verdadera de algunas cosas de las muchas que sucedieron al padre Fray Alonso Ponce en las provincias de Nueva España*, 2 vols., Madrid, 1873. All events date after 1574.

Remesal, Antonio de, *Historia General de las Indias Occidentales, y Particular de la Gobernación de Chiapa y Guatemala*, 2nd. ed.,

2 vols., Guatemala, 1932. Written between c. 1615-1617. First published in Madrid in 1619-1620.

Vásquez, Francisco, *Crónica de la Provincia del Santísimo Nombre de Jesús de Guatemala de la Orden de N. Seráfico Padre San Francisco en el Reino de la Nueva España*, 2nd. ed., 4 vols., Guatemala, 1937, 1938, 1940, 1944. First published in Guatemala in 1714-1716.

Ximénez, Francisco (born 1666), *Historia de la Provincia de San Vicente de Chiapa y Guatemala de la Orden de Predicadores*, 3 vols., Guatemala, 1929-1931. Written from c. 1700-c. 1720.

1. Juarros, I, 148 ff.; Pardo, ASGH, XXIII (1948/49), 232; Efem, 171.

2. González Bustillo, 94, states that the *arteson* was down, parts of the north and south walls were down, and the house of the priest completely destroyed.

3. Remesal, II, 610 (Bk. XI, Ch. 24). Juarros, I, 148 ff., says it is one of the oldest *ermitas* and existed at the beginning of the seventeenth century.

4. Vásquez, IV, 385 (Bk. V, tratado II, Ch. 37).

5. Fuentes, I, 403 ff. (Pt. I, Bk. XVII, Ch. XII).

6. Molina, 117, for a description; see also AGG, A1.20 (1636) 690-69, text in BAGG, X, (1945), 101 ff., the contract for "... la obra de cantería del altar mayor de la iglesia de Santo Domingo ..."; AGG, A1.20 (1648) 694-668, text in BAGG, X (1945), 102 ff., a contract to complete the *capilla mayor*.

7. Remesal, I, 72 (Bk. II, Ch. III); *ibid.*, I, 157 (Bk. III, Ch. IV); *ibid.*, I, 166 (Bk. III, Ch. VI); González Dávila (I, 143) gives founding date as 1535; AGG, A1.18 (1741) 5028-21, "Relación histórica de la provincia de San Vicente de Chiapa y Guatemala, O. P.," text in BAGG, X (1945), 104 ff.

8. AGG, A1.20 (1673) 476-10, text in BAGG, X (1945), 131 ff.

9. There are numerous references in Remesal, Ximénez, Vásquez and others describing the extremely humble character of church and *convento* buildings in the 16th century. Remesal, II, 421 (Bk. XI, Ch. IV), I, 437 ff. (Bk. VI, Ch. IX); Ponce: 439 ff., Quezaltenango; 450 ff., Comalapa; 365, Granada; 398, San Salvador; 421 ff., Ciudad Vieja; 352, Viejo, Nicaragua; 478 ff., San Cristóbal las Casas (Ciudad Real); 403, Sonsonate; 434 ff., Zamayac; Ximénez, I, 482 (Bk. II, Ch. 74); Vásquez, IV, 383 (Bk. V, tratado II, Ch. 37).

10. Ximénez, II, 334 (Bk. V, Ch. 13).

11. Efem, 71.

12. A few examples cited at random by Fuentes y Guzmán will suffice to show this was a common seventeenth-century practice: II, 197 ff. (Bk. IV, Ch. VIII), church of Asunción Mita, *capilla mayor* vaulted, rest has a wood roof; II, 195 ff. (Bk. IV, Ch. VIII), Chiquimula, only sacristy and *capilla mayor* vaulted; II, 198 (Bk. IV, Ch. VIII), Esquipulas same as Chiquimula; II, 242 (Bk. V, Ch. II), San Cristóbal Acasaguastlán, same too; II, 245 (Bk. V, Ch. III), Zacapa, same.

The conventual church of San Francisco in Antigua in 1673 was partially vaulted and partially roofed with wood, cf. *AGG*, A1.20 (1673) 476-10, text in *BAGG*, X (1945), 131 ff., also Vásquez, IV, 329 ff. (Bk. V, tratado II, Ch. 27). See footnote 8 above.

13. *Efem*, 164, "23 de Septiembre de 1727"; *ibid.*, 165, "29 de Abril de 1728," *ibid.*, 168, "11 de Mayo de 1728."

14. For a description of the city after the 1717 earthquake see Arana, also Ximénez, III, 343 ff. (Bk. VI, Ch. 85 ff.), who refutes many of Arana's statements and gives his own version of the damage.

Other earthquakes are recorded as having occurred in 1689, see *Efem*, 107 ff., in 1702, *ibid.*, 129 ff. For a general description of the many earthquakes from the sixteenth through the eighteenth centuries see Juarros, I, 161 ff.

15. Cf. footnote 1 above.

16. Pardo, *ASGH*, XXIV (1949), 369, "11 de Enero de 1746"; *ibid.*, 378, *cabildo* dated in April of 1751; cf. also *Efem*, 197, for the *cabildo* in January 1746.

17. Cf. footnote 2 above.

18. Cf. footnote 5 above.

19. The Pensativo still overflows its banks today, especially recently during the rainy season of 1954. The *murallón* was built on petition of the inhabitants of the *barrio*, cf. *Efem*, 193, "22 de Mayo de 1742."

20. *Efem*, 171. The wall probably dates from after 1731 too. The fountain is located directly in line with the façade at a distance of about 10.00 m.

21. Cf. *AGG*, A1.20 (1626) 757, text in *BAGG*, X (1945), 221 ff.

22. These domes or vaults may be described as "half watermelons" set over oblong bays. Pendentives are formed in each corner when four vertical planes cut through the half watermelon where its elliptical plan overlaps the oblong plan of the bay. When viewed in elevation, the elliptical curve of the dome is then a continuation of the pendentive curve. The same principle applies to the *bóveda váida*, the diameter of which is the diagonal of the square bay it covers, and is cut through by four vertical planes where the circular plan of the hemisphere overlaps the square plan. The curves of the spherical pendentives thus formed are indistinguishable from the dome itself which is a continuation of the pendentive curve when viewed in elevation.

Bóvedas váidas over square bays are very common in Antigua, especially in the eighteenth century: viz., Escuela de Cristo, Capitanía, Ayuntamiento, Capuchinas, and others.

The "half watermelon" dome is most commonly found over the *coro bajo* in many churches of Antigua and elsewhere in Central America.

Leopold Arnaud, in conversation, believes this type of dome is supported on squinches rather than pendentives. In the opinion of George Kubler, in correspondence, the term "handkerchief dome" might apply, except that it normally covers a square bay.

23. *Efem*, 154. Conventual church of San Francisco in Antigua. For other instances in Antigua in 1727 and 1736 see *ibid.*, 164, 181.

The church of San Felipe Ecatepec near San Cristóbal Las Casas, Chiapas, Mexico, used the same device; also the churches in San Bartolomé Milpas Altas, San Lucas, Sumpango and many others in Guatemala.

24. L. E. Elliot, *Central America*, London, 1924, facing p. 52. The pyramidal shaped roof of the south tower also appears intact.

25. Pardo, *ASGH*, XXV (1951), 147, 165; *ibid.*, XXIV (1949), 377.

26. Cf. footnote 5 above.

27. Cf. footnote 16 above.

28. The main façades of most Antiguañe churches are arranged or built in imitation of *retablos*.

Façade design in some cases was conceived as a *retablo* from the first, since the *atrio* was the area for processions. Many of the contracts for *retablos* read like descriptions of typical Antiguañe façades, see for example *AGG*, A1.20 (1690) 695-119, text in *BAGG*, X (1945), 224 ff.

There are cases when *ensambladores* (builders of *retablos*) are also architects; and in one instance even a sculptor.

29. (a) San Cristóbal el Bajo, Antigua.

(b) Santa Ana, Antigua.

(c) San José, Antigua.

(d) San Sebastián, Antigua.

(e) El Carmen, Antigua.

(f) Patzún, Depto. of Chimaltenango.

(g) Santa Isabel, Antigua.

Other examples too numerous to list here show same *retablo* façades flanked by narrow almost pilaster-like towers.

30. Cf. photograph referred to in footnote 24 above.

31. For a discussion of the design cf. footnote 28 above. In some later eighteenth-century examples the third *cuerpo* consists of two horizontal stories and is shaped more like an *espadaña*, thus adding to the total height of the façade.

32. For example, the façades of the churches of Amatenango del Valle, San Felipe Ecatepec, Iztapa, Ocozacoautla, all of which are quite plain, without niches, orders or statuary, but are still divided by means of horizontal mouldings into three *cuerpos* and the *remate*.

The same verticality achieved by means of four horizontal *cuerpos* is seen in some churches in the state of Oaxaca, Mexico.

33. (a) Conventual church of San Francisco, Antigua.

(b) Church of Chiquimula, Depto. of Chiquimula.

(c) The cathedral in Antigua.

(d) Church of La Merced, Antigua.

(e) Church of Santa Ana, Antigua.

(f) Church of San José, Antigua.

(g) San Sebastián, Antigua.

(h) Church of El Carmen, Antigua.

(i) San Cristóbal Totonicapán.

(j) San Pedro Las Huertas.

(k) San José La Arada, Chiquimula.

(l) San Cristóbal el Bajo, Antigua.

All above examples have applied superimposed orders, niches with sculptures modelled in plaster over brick cores, as well as varying amounts of *ataurique* surface decoration on the façades.

34. In general, architectural ornament, including sculpture, is rarely carried out in stone in Central America. The normal material is *mezcla*, sometimes also called *argamasa*, lime and sand mortar with a finish coat of lime plaster which must be worked rapidly before drying out and setting, frequently in the space of a single working day. Cf. footnote 33 above for examples, also footnote 21 above for plastering methods.

35. The *toisón de oro* is a popular motif and appears in many Antiguañe buildings, especially in the cathedral where it is used as a necking under the capitals of the nave piers.

36. Analogies to Mexico are dangerous as recognized by George Kubler, *Mexican Architecture of the Sixteenth Century*, New Haven, 1948, 281 ff.

37. For a statement see John McAndrew, *Art Bulletin*, XXXII (1950), 160, in a book review; with special reference to the colonial architecture of Mexico.

38. In the case of Mexican architecture see Manuel Toussaint, *Iglesias de Mexico: Vol. VI, La Arquitectura Religiosa en la Nueva España durante el Siglo XVI*, Mexico, 1927, 10.

39. This was proposed by John McAndrew, "The Relationship of Mexican Architecture to Europe: Problems in the Field of Colonial Studies," *Studies in Latin American Art*, American Council of Learned Societies, Washington, D. C., 1949, 32, where he says, "The whole post-renaissance field is thoroughly confused. Art historians have accepted no common terminology: churrigueresque, for example, seems to mean all things to all men; many clearly distinguishable styles have never been isolated and have no name at all."

The italics are mine and are meant to emphasize the fact that this statement also applies to the Guatemalan-Central American style.